

SECRET

MONTHLY REPORT

PAR 202
PAR 224
30 Sept 65

SUBJECT: PAR 202, Briefing Print Enlarger
PAR 224, 3X - 15X Fluid Gate Enlarger

TASK/PROBLEM

1. PAR 202: To design and build a prototype enlarger for exposing high-quality briefing prints in formats up to and including 20 x 24 inches in size. Magnification to be in the 10 - 60 diameter range. The enlarger will be able to produce both black-and-white and color prints. Change from one capability to the other should be made with a minimum of effort.
2. PAR 224: Develop and fabricate an enlarger having continuously variable magnification from 3X to 15X for 70mm negative gate size. Print sizes to range 40 x 40 inches on cut sheet stock.

DISCUSSION

3. Initial electrical and mechanical operational checkout of the enlarger is in progress. Several minor problems are being corrected preparatory to optical testing.
 - a. The refractive index fluid venting system tends to hold the negative material against the gate glass thereby making injection of the fluid between the negative and the glass unreliable.
 - b. The coupling between the platen indicator drum and its gear drive is designed to protect the gear drive from being overtorqued. It proved to have excessive compliance and has been redesigned.
 - c. There is an interference between the lamphouse operating handle and the negative transport operating handle. This is being eliminated.
 - d. Some difficulty has been experienced with the synchronization of the lamphouse filter wheel position switches and detents. This has been corrected.

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e. Preliminary experience with the exposure control console has indicated that some logic changes may be desirable. Nothing will be done here until further experience has been gained.

PLANNED ACTIVITY

4. In the next month, it is expected that:

a. The electrical and mechanical problems previously discussed will be under control.

b. Initial photographic tests and prints will be made to check image quality and system operation.

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